



REMARKS/ARGUMENTS

Claims 1-12 have been amended. Claims 1-12 are pending. No new matter has been added as a result of this amendment. Support for the amendments can be found in the originally filed claims, figures, and throughout the present specification at e.g., p. 4, line 13 – p. 5, line 27; p. 7, lines 5-24; p. 16, line 18 – p. 17, line 14; p. 22, line 8-20; p. 23, lines 7-27; p. 29, lines 16-28; and p. 30, lines 11-18.

Claim Objections

Claim 1 was objected to for its recitation of the phrase "...introducing light components from the light source from an incident surface..." and for applying two different names ("incident surface" and "end surface") for surface 12a as set forth in the specification at page 15, lines 4 and 5.

Applicant's amendment of claim 1 obviates the objection.

Claim 8 was objected to for its recitation of the phrase "tips of the pyramid-shaped bodies are directed to a direction opposite to that to the light guide plate." Applicant's amendment of claim 8 in accordance with the Examiner's suggestion obviates the objection.

35 U.S.C. § 112 Claim Rejections

Claim 7 was rejected under 35 USC § 112, second paragraph, as being indefinite in its recitation of the phrases "another surface of the light guide plate" and "reflector having micro-irregularities having light reflectivity formed on a base surface..."

Applicant's amendment of claim 7 obviates the rejection.

35 U.S.C. § 102 Claim Rejections

Claims 1-3 were rejected under 35 USC § 102(e) as being anticipated by Futhey et al. (US 6,612,723).

According to the Examiner, Futhey et al. (US 6,612,723) discloses a lighting device comprising a light source 12, a light guide 14 having an incident surface, and an emitting surface 15 having a plurality of wedge-shaped grooves 22 arranged parallel to the incident surface of the light guide and micro-protrusions 16 between the grooves extending in a direction parallel to the incident surface.

Futhey et al. discloses luminaire having bending grooves 22 to facilitate formation of the waveguide 14 into a waveguide tube structure, described as being haped, rectangular shaped, polygon-shaped, or triangular-shaped. The bending grooves 22 can facilitate bending of the light guide and can form a living hinge for the waveguide tube containing prisms 16 on its inner surfaces.

Claims 1-3 recite wedge-shaped grooves formulated so that light incident on the wedge-shaped grooves is capable of being split into a transmitting light component diffusing and emitting from the emitting surface of the light guide plate as illuminating light and a reflected light component capable of being re-introduced into the wedge-shaped grooves or the light diffusion surface so as to be emitting from the emitting surface of the light guide plate as illuminating light. There is nothing to suggest that the bending grooves transmit or reflect light from the light source. Moreover, Futhey's disclosed waveguide tube is not a backlight device, nor is there a suggestion that it could be used as a backlight device. Because Futhey fails to disclose every claimed limitation, Futhey does not anticipate the claimed invention.

35 U.S.C. § 103 Claim Rejections

Claims 4 and 6 were rejected under 35 USC § 103(a) as being unpatentable over Futhey et al. (US 6,612,723) in view of Parikka (US 6,592,233).

The Examiner contends that it would have been obvious to one of ordinary skill in the art to vary the distance between adjacent grooves in accordance with the teachings of Parikka in order to reduce uneven illumination.

To support a prima facie case for obviousness, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Futhey et al. fails to disclose or suggest a light guide plate or wedge-shaped grooves capable of transmitting or reflecting light. Since Futhey et al. does not disclose or suggest wedge-shaped grooves capable of transmitting or reflecting light, there would be no motivation to alter the distance between adjacent pairs of Futhey's grooves depending on their distance from the light source in accordance with the teachings of Parikka concerning uniformity of illumination. This is particularly true, since Futhey's grooves are used for reasons entirely unrelated to illumination.

Applicants respectfully request withdrawal of this rejection.

Claim 5 was rejected under 35 USC § 103(a) as being unpatentable over Futhey et al. (US 6,612,723) and Parikka (US 6,592,233) as applied to claim 4 above, and further in view of Mizutani et al. (US 6,761,461).

Applicants respectfully traverse this rejection in view of the arguments above regarding Futhey and Parikka and because since Futhey fails to disclose or suggest wedge-shaped grooves capable of transmitting or reflecting light, there would be no motivation to alter the depths of grooves further away from the light source in accordance with the teachings of Mizutani, particularly since Futhey's grooves are used for reasons entirely unrelated to illumination.

Applicants respectfully request withdrawal of this rejection.

Claims 8, 9, and 12 were rejected under 35 USC § 103(a) as being unpatentable over Futhey et al. (US 6,612,723) in view of Suzuki et al. (US 5,600,462).

Applicants respectfully traverse this rejection in view of the fact that neither Futhey, nor Suzuki disclose or suggest every limitation in the independent claim from which rejected claims 8, 9, and 12 depend.

Applicants respectfully request withdrawal of this rejection.

Claim 10 was rejected under 35 USC § 103(a) as being unpatentable over Futhey et al. (US 6,612,723) in view of Konishi et al. (US 6,835,440).

Applicants respectfully traverse this rejection in view of the fact that neither Futhey, nor Konishi disclose or suggest every limitation in the independent claim from which rejected claim 10 depends.

Applicants respectfully request withdrawal of this rejection.

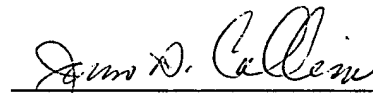
Claim 10 was rejected under 35 USC § 103(a) as being unpatentable over Futhey et al. (US 6,612,723) in view of Sasagawa et al. (US 6,636,283).

Applicants respectfully traverse this rejection in view of the fact that neither Futhey, nor Sasagawa disclose or suggest every limitation in the independent claim from which rejected claim 10 depends.

Applicants respectfully request withdrawal of this rejection.

Applicants respectfully submit that all of the pending claims are in condition for allowance and seek an allowance thereof. If, for any reason, the Examiner is unable to allow the application in the next Office Action and believes that a telephone interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorney.

Respectfully submitted,



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